



Virginia Department of Environmental Quality
Division of Land Protection and Revitalization
Office of Financial Responsibility and Waste Programs
1111 E. Main St., Suite 1400, P. O. Box 1105, Richmond, VA 23218

FACT SHEET

DRAFT HAZARDOUS WASTE MANAGEMENT PERMIT FOR TREATMENT AND STORAGE OF HAZARDOUS WASTES

July 21, 2021

<u>Facility Name</u>	Radford Army Ammunition Plant
<u>EPA Facility ID Number</u>	VA1210020730
<u>Owner/Operator</u>	U.S. Army/BAE Systems, Ordnance Systems Inc.
<u>Address of Facility</u>	4050 Peppers Ferry Road Radford, VA 24143
<u>Type of Permit</u>	40 CFR Subparts J and O Hazardous Waste Management Permit for Hazardous Waste Management Units (HWMUs), which consists of current two (2) rotary kiln incinerators and tanks and the permitted but not constructed two (2) rotary kiln incinerators and contained burn chamber at the Radford Army Ammunition Plant for the treatment and storage of explosive waste propellant.

Purpose of Fact Sheet

This fact sheet is prepared in accordance with the requirements of the Virginia Hazardous Waste Management Regulations (VHWMR), 9 VAC 20-60-124, as incorporated by reference under 40 CFR § 124.8. This fact sheet provides information on the current status of the facility, the facility background, the facility's current hazardous waste management activities, and the public comment period associated with the Draft Permit for Treatment and Storage of Hazardous Wastes (Subpart O Permit) for renewal.

Introduction - Facility Background - Draft Permit

Radford Army Ammunition Plant (RFAAP) is an operating hazardous waste management facility. The RFAAP encompasses approximately 4,104 acres of land and is located in southwest Virginia in Pulaski and Montgomery Counties approximately 5 miles northeast of the city of Radford, 10 miles west of Blacksburg, and 47 miles southwest of Roanoke. The New River

separates Pulaski and Montgomery Counties and also divides the RFAAP into two (2) portions commonly known as the Horseshoe Area and the Main Manufacturing Area (MMA).

RFAAP is an active manufacturer of explosives and propellants for the U.S. military and other commercial uses. RFAAP began manufacturing propellants in the 1940s and continues that work to this day. RFAAP has also produced TNT on an intermittent basis. RFAAP has operated two Resource Conservation and Recovery Act (RCRA) Subpart O Explosive Waste Incinerators to treat explosive waste propellant as part of the facility's hazardous waste management process since the 1970s. Also included are the two tanks used for storage and treatment of hazardous waste.

A RCRA Subpart O Operating Permit for Incinerators is required for owners and operators of hazardous waste incinerators. As of October 12, 2005 new or existing Subpart O applicable units are no longer subject to the operating standards in Subpart O as long as the facilities demonstrate compliance with the Maximum Achievable Control Technology (MACT) standards in Part 63, Subpart EEE for hazardous waste combustors. Subpart O applicable units are still required to maintain a RCRA operating permit as compliance with the MACT Subpart EEE standards does not exempt the units from other applicable RCRA requirements such as the closure requirements, start-up, shut-down and malfunction requirements, and any additional operating limits identified by the risk assessment which are not addressed by the MACT Subpart EEE standard.

RFAAP has been operating under a RCRA permit for the existing tanks and incinerators that was issued and effective on October 31, 2002. RFAAP submitted a RCRA Permit renewal application on March 20, 2012. A revised Permit application was submitted on March 6, 2015. Revisions were also received on May 18, 2015, June 18, 2015, August 17, 2015, October 26, 2015, February 18, 2016, April 25, 2016, August 4, 2016 and September 17, 2019. DEQ has reviewed the RCRA permit application and revisions, and found it to be complete and technically adequate on January 15, 2021.

Type of Waste

The major products of manufacture at RFAAP are solvent and solventless propellants that include single, double, and triple base powders; rocket propellants; as well as Load, Assemble, and Pack (LAP) medium caliber cartridges, larger mortar and artillery charges. These hazardous wastes are generated through process inefficiencies, quality failures, and production overruns. Because these materials exhibit the characteristic of reactivity, they must be managed as hazardous waste. RFAAP has operated two Resource Conservation and Recycling Act (RCRA) Subpart O Explosive Waste Incinerators to treat explosive waste propellant as part of the facility's hazardous waste management process since the 1970s. Additionally this permit renewal contains the new rotary kiln incinerators and container burn chamber units which were added to the RFAAP facility's current Subpart O permit through a Class 3 modification issued in November, 2019.

Waste Treatment Process

Treatment of hazardous waste is performed by incineration. The Explosive Waste Incinerators are fed a water and propellant slurry from two slurry tanks which receive waste propellant which has been put through the grinder system for sizing and addition of water added to it to desensitize the reactive material until reaching the incinerator units.

Purpose of the Permitting Process

One of the purposes of the permitting process is to afford the DEQ, interested citizens, and other governmental agencies the opportunity to evaluate the proposed draft permit and the ability of the Permittee to comply with the applicable hazardous waste management requirements of the Permit and the VHWMR. The draft permit sets forth in one document all the requirements that the Permittee must comply with during the ten (10) year duration of the permit. These requirements include, but are not limited to, the regulations as set forth in the VHWMR.

Draft Permit

The DEQ has reviewed the permit application, and has found the Part A and B permit application submittals to be technically adequate and complete to comply with the requirements of the VHWMR. Therefore, pursuant to the VHWMR, under 9 VAC 20-60-124, and as adopted by reference, 40 CFR § 124.6, the DEQ has prepared a draft permit for renewal.

The draft permit is divided into six main parts, Modules I, II, III, IV, V and VI and a list of twenty-seven permit attachments. Attachments II.A through V.Aa are incorporated into the permit. The six main parts of the permit are outlined below. The column entitled "Regulation," identifies the regulatory authority for the permit conditions in Parts I through VI of the Permit. The VHWMR, 9 VAC 20-60, has incorporated by reference the federal regulations under the Resource Conservation and Recovery Act (RCRA). Applicable citations of the RCRA regulations are provided below.

Permit Organization

<u>Module</u>	<u>Topic</u>	<u>Regulation</u>	<u>Description</u>
Module I	Standard Conditions	40 CFR § 270.30 and 40 CFR § 270.32	Contains conditions which generally apply to all hazardous waste management facilities
Module II	General Facility Conditions	40 CFR § 264.13-17, 40 CFR § 264.32-34, 40	Outlines the general facility conditions

<u>Module</u>	<u>Topic</u>	<u>Regulation</u>	<u>Description</u>
		CFR § 264.37, 40 CFR § 264.52-56, and 40 CFR § 264.111-120	
Module III	Operating Conditions for the EWI and EWI- CWP	40 CFR § 264.1050-1065 40 CFR § 264.1084	Contains the operating conditions for the facility and air emissions control requirements
Module IV	Storage/Treatment in the Tanks for the EWI and EWI-CWP	40 CFR § 264.190-200	Contains the requirements for the storage of hazardous wastes in tanks
Module V	Incinerator	40 CFR § 264.340-351	Contains the requirements for the operating a hazardous waste incinerator
Module VI	Site-Wide Corrective Action	40 CFR § 264.101, and 40 CFR § 270.14	Outlines the corrective action procedures required by 40 CFR § 264.101

List of Permit Attachments

The following 27 permit attachments are incorporated into the proposed draft permit by reference. Upon approval of the draft permit, the attachments will be considered enforceable conditions of this permit.

Some of the attachment documents contain excerpts from the Permittee's hazardous waste permit application. Specific language excerpted from the permit application has been modified, as deemed necessary, so to be acceptable to the DEQ.

Attachment II.A - Facility Description

Attachment II.Aa - Facility Description for the EWI-CWP Complex

Attachment II.B – Waste Analysis Plan

Attachment II.Ba - Waste Analysis Plan for the EWI-CWP Complex

Attachment II.C – Inspection Schedule

Attachment II.Ca - Inspection Schedule for the EWI-CWP Complex

Attachment II.D – Personnel Training

Attachment II.Da - Personnel Training for the EWI-CWP Complex

Attachment II.E – Contingency Plan

Attachment II.F – Closure Plan

Attachment II.Fa - Closure Plan for the EWI-CWP Complex

Attachment II.G – Security Provisions

Attachment II.Ga - Security Provisions and Maintenance for the EWI-CWP Complex

Attachment II.H - Flood Proofing/Protection Plans and Specifications and 100-Year Flood Response Procedures

Attachment II.Ha - Flood Proofing and Protection Plan

Attachment III. A - Air Emission Standards for Equipment Leaks

Attachment III.Aa - Air Emission Standards for Equipment Leaks or the EWI-CWP Complex

Attachment III.B – Scope of Work for Report on Control Device Technologies

Attachment III.Ba - Design Specifications for Subpart CC Tank Controls for the EWI-CWP Complex

Attachment IV.A – Plans and Specifications for Tanks

Attachment IV.Aa - Plans and Specifications for Tanks for the EWI-CWP Complex

Attachment IV.B - Storage and Treatment Tank Operation

Attachment IV.Ba - Storage and Treatment Tank Operation for the EWI-CWP Complex

Attachment IV.C - Procedures for Handling Reactive Wastes in Tanks

Attachment IV.Ca - Procedures for Handling Reactive Wastes in Tanks for the EWI-CWP Complex

Attachment V.A – Plans and Specifications for Incinerators

Attachment V.Aa - Plans and Specifications for Incinerators for the EWI-CWP Complex

Financial Assurance

Financial assurance is not required as the facility is owned by the United States Army, a federal government agency, and is exempt from the financial assurance requirements under 40 CFR § 264.140(c).

Public Notice of Proposed Permit Actions

The purpose of public notice of a proposed permit action is to provide the DEQ, interested citizens, other governmental agencies, etc., the opportunity to evaluate and comment upon the draft permit action proposed for the subject facility. Permits are drafted to help assure facility compliance with the final RCRA Permit and the applicable requirements of the Virginia Hazardous Waste Management Regulations (VHWMR), 9 VAC 20-60.

<u>Comment Period:</u>	Begins:	July 21, 2021
	Ends:	September 20, 2021

The public and the Permittee have sixty-one (61) days to review and comment on the draft permit action proposed for the facility.

All persons who believe any condition of a draft permit or proposed permit action is inappropriate, shall raise all reasonably ascertainable issues and submit all reasonably available arguments and factual grounds supporting their position by September 20, 2021. Comments should include sufficient supporting material, including any pertinent technical or legal references and citations believed appropriate.

All comments and supporting rationale for such comments must be provided in writing to:

Ashby R. Scott, Hazardous Waste Permit Writer
Department of Environmental Quality
Office of Financial Responsibility and Waste Programs
P.O. Box 1105
Richmond, VA 23218
Phone: (804) 698-4467
Fax: (804) 698-4178
E-mail: Ashby.Scott@deq.virginia.gov

The DEQ will also accept comments from the public by e-mail. All comments received must provide your name, mailing address, phone number, and also must be received before the end of the comment period by September 20, 2021.

Information Briefing and Public Hearing:

An informational briefing will be held on August 12, 2021 from 7:00 pm and 8:00 pm and a public hearing will be held on August 25, 2021 at 7:00 pm at the Radford Public Library (30 West Main Street, Radford, VA 24141). Copies of the proposed draft permit associated with the proposed permit reissuance and the existing Permit will be available for review at the informational briefing and hearing.

Public Information

The public may review the Draft Permit for the storage and treatment of Hazardous Waste in tanks and incinerators, the application, and this fact sheet at the following locations:

DEQ Blue Ridge Regional Office
Contact: Nichole Herschler
901 Russell Drive
Salem, VA 24153
Phone: (540) 562-6700
* Every work day by appointment

DEQ Office of Financial Responsibility and Waste Programs
Contact: Ashby Scott
1111 East Main Street, Suite 1400,
Richmond, VA 23219
Phone: (804) 698-4467
* Every work day by appointment

Radford Public Library
30 W. Main Street, Radford, VA 24141
Phone: (540) 731-3621
* During normal hours of operation

Procedures for Reaching a Final Permit Decision:

When making a final decision regarding this proposed permit action, the DEQ will consider all written comments received during the 61-day public comment period, and oral and written comments received during the public hearing, along with the requirements of the Virginia Hazardous Waste Management Regulations.

When the DEQ makes a final decision to either issue or deny the permit, final notice will be given to the applicant and each person who has submitted comments or requested notice of the final decision. The final notice will include a written response from the DEQ

to each comment submitted and will indicate any changes in the draft permit action which may have been made in response to the comments. The proposed permit action will become effective 30 days after the final permit decision notice unless a change to the draft permit is requested pursuant to the VHWMR, 9 VAC 20-60-80, and the Virginia Administrative Process Act, § 2.2 4000, et seq., of the Code of Virginia and the Virginia Waste Management Board Public Participation Guidelines, 9 VAC 20-10. If no comments request a change in the draft permit, the decision shall become effective immediately upon issuance.